STATE OF TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243-1531



Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued: August 23, 2013

Permit Number:

967434P

Date Expires: August 1, 2014

Issued To:

Installation Address:

New Cingular Wireless PCS, LLC

161 County Road 216

Niota

DBA: AT&T Mobility

Installation Description:

Emission Source Reference No.

54-0245-01

One (1) Internal Combustion Diesel Fuel-Fired Engine (93 hp) for an Emergency Backup Generator

NSPS (Subpart IIII)
GACT (Subpart ZZZZ)

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated June 5, 2013, and is signed by Michele M. Blazek, Assistant Secretary for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(conditions continued on next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

- 2. The stated design heat input capacity for this internal combustion engine (Iveco engine rated 70 KW serving GENERAC Generator Model# 5564-0 (SD-050)) is **0.57 MMBtu** per hour. Any increase in this capacity will require a construction permit.
- 3. This source is subject to the requirements of 40 CFR Part 60 Subpart IIII, the requirements of 40 CFR 89.112, and the provisions of TAPCR 1200-03-09-.03(8).
- 4. The Permittee must operate the emergency stationary ICE according to the requirements in Conditions 5, 6, & 7 in order for the engine to be considered an emergency stationary ICE under Subpart IIII. Any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for up to 50 hours per year, as described in Conditions 5, 6, & 7 is prohibited. If the emergency stationary ICE is not operated according to the requirements in Conditions 5, 6, & 7 the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines under Subpart IIII. §60.4211(f)
- 5. The emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response, as specified in **Condition 6**. Except as provided in **Condition 7**, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. \$60.4211(f)(3)
- 6. Pursuant to \$60.4211(f)(2), the emergency stationary ICE may be operated for any combination of the purposes specified in (a) through (c) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations, as specified in Condition 5, counts as part of the 100 hours per calendar year.
 - (a) The emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Technical Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing beyond 100 hours per calendar year.
 - (b) The emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (c) The emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- 7. Pursuant to \$60.4211(f)(3)(i), the 50 hours per year for non-emergency situations as specified in **Condition 5** can be used to supply power as part of a financial arrangement with another entity if all of the following conditions (a) through (d) are met:
 - (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

- (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (d) The power is provided only to the facility itself or to support the local transmission and distribution system.
- Operating time for this emergency generator shall not exceed maximum of 500 hours 8. per calendar year pursuant to TAPCR 1200-03-09-.03(8) and the agreement letter dated June 26, 2013 from the Permittee.

Compliance with this limitation shall be assured by compliance with the records required by Condition 9.

The Permittee shall keep a log of the number of operating hours for each calendar 9. year at this source, in a form that readily provides the information required in the following table and shows compliance with Conditions 5, 6, & 8. All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the month for which the data is required. The Permittee shall retain this record for a period of not less than two (2) years and keep this record readily available for inspection by the Technical Secretary or their representative. TAPCR 1200-03-10-.02(2)(a).

YEARLY Log	g for Sou	rce 54-0245-0 :	L			Year	
Operation#	Dates	Classification of operation	Start time	End time	Operation time (End – Start)	Yearly total for non-emergency time	Yearly total for emergency time
#1	1						
#2							
#3							
Example: #1	4/20/2013	Maintenance	10:45 AM	11:15 AM	0.50 hours	16.25 hours	50.25 hours
Example: #2	5/15/2013	Readiness Testing	1:45 PM	3:00 PM	1.25 hours	17.50 hours	50.25 hours
Example: #3	5/17/2013 5/18/2013	Power Failure caused by lightning	2:45 PM	4:00 AM	13.25 hours	17.50 hours	63.50 hours

- The permittee must use diesel fuel that meets the requirements of 40 CFR 60.4207(b). 10. Except as otherwise specifically provided, the diesel fuel is subject to the following per-gallon standards:
 - (1) Sulfur content of 15 ppm maximum.
 - (2) Cetane index or aromatic content, as follows:
 - (i) A minimum cetane index of 40; or
 - (ii) A maximum aromatic content of 35 volume percent.
- This source shall operate in accordance with the terms of this permit and the 11. information submitted in the approved permit application. TAPCR 1200-03-09
- The permit is valid only at this location. TAPCR 1200-03-09 12.
- The issuance of this permit does not exempt the Permittee from any requirements of 13. the Environmental Protection Agency pertaining to emissions from the operation of this source. TAPCR 1200-03-09

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14. The engine for the following emergency power generator is subject to the requirements of 40 CFR Part 60 (NSPS), Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The permittee shall be subject to the following limitations:

Generator	GEN 1 (50 KW)				
Model #	GENERAC 5564-0 (SD-050)				
Model Year	2011				
Heat-Input	0.57				
(MMBtu/hr)	V.5 /				
Power-Out	93				
(Horsepower)	75				
Applicable					
Emission	§60.4205(b) & §89.112 Tier #3				
Standards	· · · · · · · · · · · · · · · · · · ·				
Units of					
Measure	grams/Kw-hr				
PM	0.40				
SO_2					
CO	5.0				
NO_X					
VOC	MF PPI				
NMHC + NO _X	4.7				
Emissions Limits	Tons/year				
	0.02				
PM					
SO ₂	0.05				
CO	0.19				
NO _X	0.18				
VOC					

15. Particulate matter (TSP) emitted from this source shall not exceed 0.40 grams/Kw-hr (0.06 lb/hr and 0.02 tons/yr). This emission limitation is established pursuant to the Emission Standards in 40 CFR 89.112, Table 1.

Compliance with PM limitation shall be assured with Conditions 2, 10, the records required by Condition 9 and the manufacturer's certification of compliance pursuant to 40 CFR §60.4205. Any increase in this limit will require a construction permit.

16. Carbon Monoxide (CO) emitted from this source shall not exceed 5.0 grams/Kw-hr (0.76 lb/hr and 0.19 tons/year). This emission limitation is established pursuant to the Emission Standards in 40 CFR 89.112, Table 1 and TAPCR 1200-03-07-.07(2).

Compliance with CO limitation shall be assured with Conditions 2, 10, the records required by Condition 9 and the manufacturer's certification of compliance pursuant to 40 CFR \$60.4205. Any increase in this limit will require a construction permit.

17. Nitrogen Oxides (NO_x) emitted from this source shall not exceed 4.7 grams/Kw-hr (0.72 lb/hr and 0.18 tons/yr). This emission limitation is established pursuant to the Emission Standards in 40 CFR 89.112, Table 1 and TAPCR 1200-03-07-.07(2).

Compliance with NO_x limitation shall be assured with Conditions 2, 10, the records required by Condition 9 and the manufacturer's certification of compliance pursuant to 40 CFR \$60.4205. Any increase in this limit will require a construction permit.

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- 18. Sulfur-dioxide (SO₂) emitted from this source shall not exceed **0.19 lb/hr nor 0.05** tons/year. TAPCR 1200-03-14-.03(5).
 - Compliance with SO_2 limitation shall be assured with Conditions 2, 10 and the records required by Condition 9. Any increase in this limit will require a construction permit.
- 19. The owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, must install a non-resettable hour meter prior to startup of the engine. The meter is required per monitoring requirements of NSPS \$60.4209(a).
 - Since this facility has purchased an engine that is certified to meet the non-road Tier 3 limits, it meets the non emergency engine standards. Although an hour meter is not required as per NSPS Subpart IIII, the permittee will utilize a non-resettable hour meter to determine hours of operation and will denote same in the log contained in **Condition 9**.
- 20. Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average). TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)
- 21. The permittee shall operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer. 40 CFR §60.4211(a).
- 22. Under the Provisions of 40 CFR 63 Subpart ZZZZ-National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), this facility is considered to be a "new" stationary RICE located at an "Area Source." This unit is considered to be new because its construction commenced on or after June 12, 2006. (according to Subpart ZZZZ §63.6590).
 - §63.6590(c) states that a new or reconstructed stationary RICE located at an area source must meet the requirements of this part by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines. No further requirements apply for such engines under Subpart ZZZZ.
- 23. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards. TAPCR 1200-03-09
- 24. This permit shall serve as a temporary operating permit until receipt of a standard operating permit (regardless of the expiration date), provided the operating permit is applied for within the time period specified in **Condition 25** of this permit and provided the conditions of this permit and any applicable emission standards are met. TAPCR 1200-03-09
- 25. The Permittee shall apply for an operating permit for this facility no more than thirty (30) days after initial start-up, pursuant to the Tennessee Air Pollution Control Regulation 1200-03-09-.02(3).

26.	The	Permittee	shall	certify	the	start-up	date	of the	air	contaminant	source
	regu	lated by th	is perm	nit by sub	omitt	ing					

A COPY OF ALL PAGES OF THIS PERMIT, with the information required in A) and B) of this condition completed, to the Technical Secretary's representatives listed below:

- A) DATE OF START-UP: month / day / year
- B) Anticipated operating rate: percent of maximum rated capacity

For the purpose of complying with this condition, "start-up" of this air contaminant source shall be the date of the setting in operation of the source for the production of electric power.

The undersigned represents that he/she has the full authority to represent and bind the Permittee in environmental permitting affairs. The undersigned further represents that the above provided information is true to the best of his/her knowledge and belief.

Signature		Date
Signer's name (type or print)	Title	Phone (with area code)

Note: This certification is <u>not</u> an application for an operating permit. At a minimum, the appropriate application form(s) must be submitted requesting an operating permit. The application must be submitted in accordance with the requirements of this permit.

The completed certification shall be delivered to the East Tennessee Permit Program and the Field Office at the addresses listed below, no later than thirty (30) days after the air contaminant source is started-up.

East Tennessee Permit Program Division of Air Pollution Control William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15th Floor Nashville, TN 37243 Chattanooga Environmental Field Office Division of Air Pollution Control 540 McCallie Avenue Suite 550, 5th Floor Chattanooga, TN 37402

(End of Conditions)

ATTACHMENT

Table 8 to Subpart IIII Part 60 - Applicability of General Provisions

General Provisions citation	Subject of citation	Applies to subpart	
§60.1	General applicability of the General Provisions	Yes	·
§60.2	Definitions		Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Yes	Except that $\$60.8$ only applies to stationary CI ICE with a displacement of ≥ 30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements		Except that $\$60.13$ only applies to stationary CI ICE with a displacement of ≥ 30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	